

## REMARKS

By this Amendment, claims 1-15 are cancelled, and claims 16-39 are added. Thus, claims 16-39 are active in the application. Reexamination and reconsideration of the application are respectfully suggested.

The specification and abstract have been carefully reviewed and revised in order to correct grammatical and idiomatic errors in order to aid the Examiner in further consideration of the application, and to correct the informalities of the specification as identified by the Examiner in items 1 and 2 on page 2 of the Office Action. The amendments to the specification and abstract are incorporated in the attached substitute specification and abstract. No new matter has been added.

Also attached hereto is a marked-up version of the substitute specification and abstract illustrating the changes made to the original specification and abstract.

The Applicants thank the Examiner for acknowledging, in item 12 on the Office Action Summary form, the Applicants' claim of foreign priority to Japanese Patent Application No. 2000-134118, filed on May 8, 2000. However, the Examiner indicated in item 12 on the Office Action Summary form that a certified copy of the priority document was not received by the U.S. Patent and Trademark Office. Accordingly, a certified copy of Japanese Patent Application No. 2000-134118 is submitted concurrently herewith together with a Claim of Priority. The Applicants respectfully request the Examiner to acknowledge receipt of the certified copy of the priority document.

The title of the invention has been revised to "Compression Process for Storing Trend and Characteristics of Information in a Computer, Dummy Picture Compression Signal, Data Compression Means, Method for Compressing Data, and Method for Reproducing Data" in order to correct grammatical errors in the original title of the invention. The Applicants submit that the new title of the invention is clearly indicative of the inventions to which the claims are directed. Accordingly, approval of the new title of the invention is respectfully requested.

Replacement formal drawings of Figures 1-5 are submitted concurrently herewith in order to correct the misspelled term "arrey" in the x-axis of each of Figures 3 and 4. Approval of the replacement formal drawings is respectfully requested.

In item 4 on page 2 of the Office Action, claims 4-6 were rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. This rejection is believed to be moot in view of the cancellation of claims 4-6. The Applicants note that new claims corresponding to cancelled claims 4-6 have not been added. Accordingly, the Applicants respectfully request the Examiner to withdraw the rejection under 35 U.S.C. § 101.

In item 6 on page 3 of the Office Action, claims 1-15 were rejected under 35 U.S.C. § 102(b) as being anticipated by Sinisalo (U.K. Patent Application No. 2280827). This rejection is believed to be moot in view of the cancellation of claims 1-15. Furthermore, the Applicants respectfully submit that this rejection is inapplicable to new claims 16-39 for the following reasons.

An object of the present invention is to ensure that when data is transmitted from one site to another, the characteristics and trend of the data are maintained when the data is compressed and then decompressed. The present invention accomplishes this by dummy picturing a predetermined number of first order original data which vary from each according to a first parameter such as a frequency. For instance, as discussed in lines 13-21 on page 3 and in lines 16-24 on page 5 of the original specification, Fast Fourier Transform (FFT) analysis data, which is first order data (see Figure 3), correspond to a first parameter of frequency. A characteristic curve of the first order data can be lined on a graph to indicate how the first order data is varied by first parameter. For instance, Figure 3 illustrates how the first order data varies according to frequency.

Further, as shown in Figure 4, a predetermined number of the first order data which vary from each other according to the first parameter are combined into dummy pictured data, which includes a plurality of second order data that vary from each other according to the first parameter and a second parameter such as time. The dummy picture data is then compressed and transmitted to a remote site.

The present invention, as recited in new claims 16 and 28, achieves this object by providing a communication process which comprises dummy-picturing a predetermined number of first order original data which vary from each other according to a first parameter so as to combine the predetermined number of first order original data into

dummy pictured data including a plurality of second order data which vary from each other according to the first parameter and a second parameter.

The present invention, as recited in new claims 18 and 20, also achieves this object by providing a communication process which comprises dummy-picturing a predetermined number of first order original data including important information about characteristic curves of the first order original data, which vary from each other according to a first parameter, so as to combine the predetermined number of first order signal data into dummy pictured data including a plurality of second order data which vary from each other according to the first parameter and a second parameter.

Further, the present invention, as recited in new claims 22, 24, 26, 30 and 32 also achieves this object by providing a data compression process which comprises dummy picturing a predetermined number of the data, which are first order original data and which vary from each other according to a first parameter, so as to combine the predetermined number of first order original data, at the transmitting site, into dummy pictured data including a plurality of second order data which vary from each other according to the first parameter and a second parameter.

The present invention, as recited in new claims 34, 36 and 38, also achieves this object by providing a method for recovering data which comprises receiving compressed dummy pictured data so as to recover the dummy pictured data, the dummy picture including a plurality of second order data which vary from each other according to a first parameter and a second parameter, and the dummy picture resulting from combining a predetermined number of first order original data which vary from each other according to the first parameter.

Sinisalo discloses a method of compressing speech and reconstructing speech in which a one-dimensional speech signal is transformed frame by frame from a time domain into a frequency domain. The transformation of each frame of speech is performed with a FFT algorithm, and a two-dimensional image matrix is produced in which the frames of the frequency domain are presented as a function of time (see lines 16-23 on page 3, lines 3-5 on page 5, and Figures 1-2). Accordingly, Sinisalo merely discloses that a plurality of one-dimensional data are transformed frame by frame into two-dimensional data which vary according to a single parameter, i.e., time.

However, as described above, the present invention dummy pictures a predetermined number of first order original data which vary from each other according to a first parameter so as to combine the first order original data into a plurality of second order data. The dummy pictured data thus includes a plurality of second order data which vary from each other according to the first parameter and a second parameter, i.e., a plurality of second order data which each vary from each other according to two parameters. Sinisalo, however, merely discloses compressing data first order data which vary from each other only by a first parameter, i.e., time.

Therefore, Sinisalo clearly does not disclose or suggest dummy-picturing a predetermined number of first order original data which vary from each other according to a first parameter so as to combine the predetermined number of first order original data into dummy pictured data including a plurality of second order data which vary from each other according to the first parameter and a second parameter, as recited in new claims 16 and 28. Similarly, Sinisalo also clearly does not disclose or suggest dummy-picturing a predetermined number of first order original data including important information about characteristic curves of the first order original data, which vary from each other according to a first parameter, so as to combine the predetermined number of first order signal data into dummy pictured data including a plurality of second order data which vary from each other according to the first parameter and a second parameter, as recited in new claims 18 and 20.

Furthermore, Sinisalo also clearly does not disclose or suggest dummy picturing a predetermined number of the data, which are first order original data and which vary from each other according to a first parameter, so as to combine the predetermined number of first order original data, at the transmitting site, into dummy pictured data including a plurality of second order data which vary from each other according to the first parameter and a second parameter, as recited in new claims 22, 24, 26, 30 and 32.

Moreover, Sinisalo also clearly does not disclose or suggest receiving compressed dummy pictured data so as to recover the dummy pictured data, the dummy picture including a plurality of second order data which vary from each other according to a first parameter and a second parameter, and the dummy picture resulting from combining a

predetermined number of first order original data which vary from each other according to the first parameter, as recited in new claims 34, 36 and 38.

Accordingly, Sinisalo clearly does not disclose each and every limitation of new claims 16, 18, 20, 22, 24, 26 and 28, and therefore, new claims 16, 18, 20, 22, 24, 26 and 28 are clearly not anticipated by Sinisalo.

Furthermore, the clear distinctions discussed above between the present invention and Sinisalo are such that a person having ordinary skill in the art at the time the present invention was made would not have been motivated to modify Sinisalo in such a manner as to result in, or otherwise render obvious, the present invention as recited in new claims 16, 18, 20, 22, 24, 26 and 28. Therefore, it is submitted that the new claims 16, 18, 20, 22, 24, 26 and 28, as well as new claims 17, 19, 21, 23, 25, 27 and 29 which depend therefrom, are clearly allowable over the prior art as applied by the Examiner.

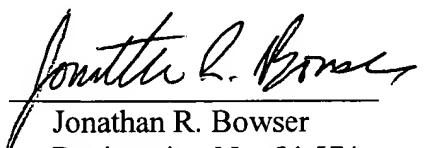
In view of the foregoing amendments and remarks, it is respectfully submitted that the present application is clearly in condition for allowance. An early notice thereof is respectfully solicited.

If, after reviewing this Amendment, the Examiner feels there are any issues remaining which must be resolved before the application can be passed to issue, the Examiner is respectfully requested to contact the undersigned by telephone in order to resolve such issues.

Respectfully submitted,

Hideaki EMOTO et al.

By:

  
Jonathan R. Bowser  
Registration No. 54,574  
Attorney for Applicants

JRB/ck  
Washington, D.C. 20006-1021  
Telephone (202) 721-8200  
Facsimile (202) 721-8250  
August 26, 2004